|  | Application No.   | Applicant(s)                 |
|--|---|------------------------------|
|  | 10/807,504  | BENAZZI ET AL.               |
| Notice of Allowability   | Examiner  | Art Unit                     |
|  | David Sample  | 1755                         |
| <u>_</u>   |   |                              |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |   |                              |
| 1. This communication is responsive to the amendment, response and terminal disclaimer filed November 14, 2006.  |   |                              |
| 2. The allowed claim(s) is/are <u>1-16</u> .   |   |                              |
| 3. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some* c) ☐ None of the:  |   |                              |
| 1. Certified copies of the priority documents have been received.  |   |                              |
| Certified copies of the priority documents have been received in Application No  |   |                              |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the   |   |                              |
| International Bureau (PCT Rule 17.2(a)).   |   |                              |
| * Certified copies not received:   |   |                              |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   |                              |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |   |                              |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.   |   |                              |
| (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |                              |
| 1) hereto or 2) to Paper No./Mail Date   |   |                              |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |   |                              |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |   |                              |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |   |                              |
|  |   |                              |
|  |   |                              |
| Attachment(s)  1. Notice of Peferences Cited (PTO 892)   | 5 Motion of Informal D  | tetest Application           |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>  | <ul><li>5. ☐ Notice of Informal Page 6. ☐ Interview Summary</li></ul> | • •                          |
|  | Paper No./Mail Date   | te                           |
| Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date   | 7. 🗌 Examiner's Amendr  | nent/Comment                 |
| 4. Examiner's Comment Regarding Requirement for Deposit  | 8. X Examiner's Stateme   | ent of Reasons for Allowance |
| of Biological Material   | 9.  | •                            |
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## REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Upon further consideration, NU-10 is not isostructural with ZBM-30 for the reasons noted in applicants' response and the prior art rejection is not proper.

At the outset, it should be noted that the phrase "synthesized with a structure directing agent consisting essentially of triethylenetetramine" is a process limitation in a product claim. Therefore, claims 1-6 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. (The catalyst would <u>not</u> contain triethylenetetramine because the triethylenetetramine would be removed when the zeolite is calcined.)

Turning now to the prior art, catalysts are known that contain a mixture of matrix, ZBM-30 and a hydro/dehydrogenating metal. See, e.g., Benazzi et al. (WO 01/64339); Benazzi et al. (WO 02/42890). The references do not specify which directing agent is employed to form the ZBM-30. Therefore, it would have been obvious to one of ordinary skill in the art to have employed any structuring agent known to form ZBM-30, including triethylenetetramine or tetramethylenediamine. However, in the present case, applicants have shown that the use of triethylenetetramine results in an unexpectedly improved catalyst as compared to, for example, a ZBM-30 made with hexamethylenediamine. See Examples 1, 2, and 4 of the specification. Therefore, the prior art fails to disclose or suggest a catalyst containing ZBM-30 made from triethylenetetramine, a matrix and a hydro/dehydrogenating metal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (572)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Sample Primary Examiner Art Unit 1755